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|      |    |        |  |
|------|----|--------|--|
| NEWS | 1  |        | Web Page URLs for STN Seminar Schedule - N. America                          |
| NEWS | 2  | Apr 08 | "Ask CAS" for self-help around the clock                                     |
| NEWS | 3  | Apr 09 | BEILSTEIN: Reload and Implementation of a New Subject Area                   |
| NEWS | 4  | Apr 09 | ZDB will be removed from STN   |
| NEWS | 5  | Apr 19 | US Patent Applications available in IFICDB, IFIPAT, and IFIUDB               |
| NEWS | 6  | Apr 22 | Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS                |
| NEWS | 7  | Apr 22 | BIOSIS Gene Names now available in TOXCENTER                                 |
| NEWS | 8  | Apr 22 | Federal Research in Progress (FEDRIP) now available                          |
| NEWS | 9  | Jun 03 | New e-mail delivery for search results now available                         |
| NEWS | 10 | Jun 10 | MEDLINE Reload   |
| NEWS | 11 | Jun 10 | PCTFULL has been reloaded  |
| NEWS | 12 | Jul 02 | FOREGE no longer contains STANDARDS file segment                             |
| NEWS | 13 | Jul 22 | USAN to be reloaded July 28, 2002;<br>saved answer sets no longer valid      |
| NEWS | 14 | Jul 29 | Enhanced polymer searching in REGISTRY                                       |
| NEWS | 15 | Jul 30 | NETFIRST to be removed from STN  |
| NEWS | 16 | Aug 08 | CANCERLIT reload   |
| NEWS | 17 | Aug 08 | PHARMAMarketLetter(PHARMAML) - new on STN                                    |
| NEWS | 18 | Aug 08 | NTIS has been reloaded and enhanced  |
| NEWS | 19 | Aug 19 | Aquatic Toxicity Information Retrieval (AQUIRE)<br>now available on STN      |
| NEWS | 20 | Aug 19 | IFIPAT, IFICDB, and IFIUDB have been reloaded                                |
| NEWS | 21 | Aug 19 | The MEDLINE file segment of TOXCENTER has been reloaded                      |
| NEWS | 22 | Aug 26 | Sequence searching in REGISTRY enhanced                                      |
| NEWS | 23 | Sep 03 | JAPIO has been reloaded and enhanced   |
| NEWS | 24 | Sep 16 | Experimental properties added to the REGISTRY file                           |
| NEWS | 25 | Sep 16 | CA Section Thesaurus available in CAPLUS and CA                              |
| NEWS | 26 | Oct 01 | CASREACT Enriched with Reactions from 1907 to 1985                           |
| NEWS | 27 | Oct 21 | EVENTLINE has been reloaded  |
| NEWS | 28 | Oct 24 | BEILSTEIN adds new search fields   |
| NEWS | 29 | Oct 24 | Nutraceuticals International (NUTRACEUT) now available on STN                |
| NEWS | 30 | Oct 25 | MEDLINE SDI run of October 8, 2002   |
| NEWS | 31 | Nov 18 | DKILIT has been renamed APOLLIT  |
| NEWS | 32 | Nov 25 | More calculated properties added to REGISTRY                                 |
| NEWS | 33 | Dec 02 | TIBKAT will be removed from STN  |
| NEWS | 34 | Dec 04 | CSA files on STN   |
| NEWS | 35 | Dec 17 | PCTFULL now covers WP/PCT Applications from 1978 to date                     |
| NEWS | 36 | Dec 17 | TOXCENTER enhanced with additional content                                   |
| NEWS | 37 | Dec 17 | Adis Clinical Trials Insight now available on STN                            |
| NEWS | 38 | Dec 30 | ISMEC no longer available  |
| NEWS | 39 | Jan 13 | Indexing added to some pre-1967 records in CA/CAPLUS                         |
| NEWS | 40 | Jan 21 | NUTRACEUT offering one free connect hour in February 2003                    |
| NEWS | 41 | Jan 21 | PHARMAML offering one free connect hour in February 2003                     |
| NEWS | 42 | Jan 29 | Simultaneous left and right truncation added to COMPENDEX,<br>ENERGY, INSPEC |

NEWS EXPRESS    January 6 CURRENT WINDOWS VERSION IS V6.01a,  
                   CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),  
                   AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002  
 NEWS HOURS      STN Operating Hours Plus Help Desk Availability  
 NEWS INTER      General Internet Information  
 NEWS LOGIN      Welcome Banner and News Items  
 NEWS PHONE      Direct Dial and Telecommunication Network Access to STN  
 NEWS WWW        CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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| => file medline embase biosis scisearch caplus hcaplus |            |         |
| COST IN U.S. DOLLARS                                   | SINCE FILE | TOTAL   |
|  | ENTRY      | SESSION |
| FULL ESTIMATED COST                                    | 0.21       | 0.21    |

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=> s RN 93-76-5  
 L1            0 RN 93-76-5

=> s 93-76-5  
 L2            9082 93-76-5

=> s l2 and acetone  
 L3            118 L2 AND ACETONE

=> s l3 and trichlorobenzene hapten  
 L4            0 L3 AND TRICHLOROBENZENE HAPTEN

=> s 13 and TCB hapten  
L5 0 L3 AND TCB HAPTEN

=> s 13 and TCB  
L6 0 L3 AND TCB

=> s 13 and trichlorobenzene  
L7 18 L3 AND TRICHLOROBENZENE

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PROCESSING COMPLETED FOR L7  
L8 9 DUP REMOVE L7 (9 DUPLICATES REMOVED)

=> d 18 1-9 cbib abs

L8 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 1  
2001:89039 Document No. 134:212358 Dimension reduction and source  
identification for multispecies groundwater contamination. Duffy, C. J.;  
Brandes, D. (Department of Civil and Environmental Engineering, The  
Pennsylvania State University, University Park, PA, 16802, USA). Journal  
of Contaminant Hydrology, 48(1-2), 151-165 (English) 2001. CODEN: JCOHE6.  
ISSN: 0169-7722. Publisher: Elsevier Science B.V..

AB Assessment of chem. contamination at large industrial complexes with long  
and sometimes unknown histories of operation represents a challenging  
environmental problem. The spatial and temporal complexity of the  
contaminant may be due to changes in prodn. processes, differences in the  
chem. transport, and the phys. heterogeneity of the soil and aquifer  
materials. Traditional mapping techniques are of limited value for sites  
where dozens of chems. with diverse transport characteristics may be  
scattered over large spatial areas without documentation of disposal  
histories. In this context, a site with a long and largely undocumented  
disposal history of shallow groundwater contamination is examd. using  
principal component anal. (PCA). The dominant chem. groups and chem.  
modes at the site were identified. PCA results indicate that 5 primary  
and three transition chem. groups can be identified in the space of the  
1st 3 eigenvectors of the correlation matrix, which account for 61% of the  
total variance of the data. These groups represent a significant redn. in  
the dimension of the original data (116 chems.). It is shown that each  
group represents a class of chems. with similar chemo-dynamic properties  
and/or environmental response. The groups are mapped back onto the site  
map to infer delineation of contaminant source areas for each class of  
comps. The approach serves as a preliminary step in subsurface  
characterization, and a data redn. strategy for source identification,  
subsurface modeling and remediation planning.

L8 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 2  
2000:805407 Document No. 134:20790 Pollutant-Specific Scale of Multimedia  
Models and Its Implications for the Potential Dose. Hertwich, Edgar G.;  
McKone, Thomas E. (LCA-Laboratory, Norwegian University of Science and  
Technology, Trondheim, 7491, Norway). Environmental Science and  
Technology, 35(1), 142-148 (English) 2001. CODEN: ESTHAG. ISSN:  
0013-936X. Publisher: American Chemical Society.

AB The spatial range is a generic indicator for how far pollutants are likely  
to travel. It also indicates the appropriate, pollutant-specific area of  
a multimedia model, which is the square of the spatial range.  
Formulations of the spatial range can be based on advective or dispersive  
transport. They differ in whether they take the extent and shape of the  
earth's surface into account. We suggest the common element of the  
different approaches is that all account for the persistence and mobility  
of pollutants. The mobility is the expected travel speed and depends on  
the partitioning. This paper extends the concept of a pollutant-specific

model scale through the introduction of a characteristic atm. scale height. It is the height of the atm. that would be needed to contain all the pollutant if the entire atm. had ground-level concn., taking into account deposition and degrdn. We define the spatial range as the expected advection-driven travel distance of a pollutant mol. released to a specific compartment. This novel anal. formulation is more comprehensive but encompasses all previous advection-based proposals of a spatial range. We evaluate the spatial range and scale height of 288 chems. for releases to air, surface water, and surface soil. We find a strong correlation between the spatial range for air releases and the scale height because both depend on persistence. We investigate the effect of the spatial scale on calcns. of the human toxicity potential, a screening-level risk indicator based on toxicity and potential dose. The product of model area and potential dose is found to be the same for calcns. using a fixed model area and those using the pollutant-specific spatial scale. The introduction of the scale height, however, can change the potential dose by more than 1 order of magnitude.

L8 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 3  
 1999:807646 Document No. 132:39919 Statistical comparison of leachate from hazardous, codisposal, and municipal solid waste landfills. Gibbons, Robert D.; Dolan, David G.; May, Helen; O'Leary, Kevin; O'Hara, Richard (University of Illinois at Chicago, IL, USA). Ground Water Monitoring and Remediation, 19(4), 57-72 (English) 1999. CODEN: GWMREV. ISSN: 1069-3629. Publisher: Ground Water Publishing.

AB There has been considerable debate regarding the chem. characterization of landfill leachate in general and the comparison of various types of landfill leachate (e.g., hazardous, codisposal, and municipal) in particular. For example, the preamble to the US EPA Subtitle D regulation (40 CFR Parts 257 and 258) suggests that there are no significant differences between the no. and concn. of toxic constituents in hazardous vs. municipal solid waste landfill leachate. The purpose of this paper is to statistically test this hypothesis in a large leachate database comprising 1490 leachate samples from 283 sample points (i.e., monitoring location such as a leachate sump) in 93 landfill waste cells (i.e., a section of a facility that took a specific waste stream or collection of similar waste streams) from 48 sites with municipal, codisposal, or hazardous waste site histories. Results reveal clear differentiation between landfill leachate types, both in terms of constituents detected and their concns. The result is a classification function that can est. the probability that new leachate or groundwater sample was produced by the disposal of municipal, codisposal, or hazardous waste. This type of computation is illustrated, and applications of the model to Superfund cost-allocation problems are discussed.

L8 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 4  
 1998:666024 Document No. 129:299139 Toxicity tests in cell cultures for the purpose of predicting acute toxicity (LD50) and reducing the number of animal experiments. Halle, Willi (Forschungszentrum Juelich G.m.b.H., Juelich, D-52425, Germany). Schriften des Forschungszentrums Juelich, Lebenswissenschaften/Life Sciences, 1, 1-92 (German) 1998. CODEN: SFLSF9. ISSN: 1433-5549. Publisher: Forschungszentrum Juelich GmbH.

AB An in vitro procedure for the redn. of animal expts. for toxicity tests of drugs or chems. is presented. Cytotoxicity data from in vitro cultivated mammalian cell lines were compared with acute toxicity data to predict the acute toxicity effects of xenobiotics in lab. animals. The procedure is based on a comparison of IC50 values (IC50x) with LD50 values using linear regression anal. An enlarged registry (RC) of cytotoxicity is presented contg. cytotoxicity data (IC50x) from non-selected chems. and drugs, the acute oral and i.v. LD50 values (LD50 p.o. and LD50 i.v.) from rats and mice, and the phys.-chem. characteristics of the chems. For the substances of the RC, sorted according to their IC50x-LD50 p.o. pairs, the

linear regression parameters were:  $r = 0.672$ , intercept  $a = 0.625$ , and slope  $b = 0.435$ . For the IC50x-LD50 i.v. pairs, the same parameters were:  $r = 0.768$ ,  $a = -0.201$ , and  $b = 0.480$ . Approx. 73% of the p.o. values and 78% of the i.v. values are localized in the LD50 dosage range around the regression lines defined by an empirical factor  $FG.\log 5$ . This percentage factor characterizes the dosage range of LD50 deviating from the regression line by the min. and max. residuals  $\log 0.699$ . The reliability of the predictive procedure was secured by using different biometrical methods and by comparisons of literature results with the data pool in the RC. The allocation of chems. into the 4 toxicity classes of acute oral toxicity defined by EU regulations (OECD Guide-line 423) resulted in an accuracy of 85% in predicting the toxicity classes of the RC-substances in comparison to the toxicity classes of the corresponding NIOSH LD50 values. A comparison of RC-data with the Acute Toxic Class(ATC) method for the classification of chems. into toxicity classes resulted in a combined RC-ATC-procedure allowing the redn. of animal nos. for allocating chems. to the EU toxicity classes by 30%.

L8 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 5  
 1997:613701 Document No. 127:238509 Development of structure biodegradability relationships (SBRs) for estimating half-lives of organic contaminants in soil systems. Govind, R.; Lei, L.; Tabak, H. (Department of Chemical Engineering, University of Cincinnati, Cincinnati, OH, 45221-0171, USA). NATO ASI Series, Series 2: Environment, 23(Biodegradability Prediction), 115-138 (English) 1996. CODEN: NSSEF4. ISSN: 1431-7141. Publisher: Kluwer.

AB Knowledge of half-lives or biodegradn. rate consts. in soil is useful for estg. the natural attenuation rates of contaminants due to microbial transformations and to make decisions regarding treatment action or no treatment with isolation of the contaminated site to minimize exposure to animal and human life. Half-life is defined as the time required for 50% of the contaminant to be biodegraded. Soil treatment is time consuming and expensive, and often for large isolated contaminated sites, relying on natural attenuation may be the most cost-effective soln. A neural network is trained to est. the range of half-lives for org. contaminants in soil. Soil half-life data, obtained from the literature for 258 chems. is correlated with 14 mol. fragments or indicators using a back-propagation neural network with 14 input nodes, 12 nodes in the hidden layer and 2 output nodes. A cross-validation method was used to test the neural network. The converged neural network produced <50% relative error for >80% of the chems. in the training set. Using a classification scheme of fast (half-life 1-7 days), moderately fast (half-life 7-28 days), slow (half-life 28-180 days) and resistant (half-life 180-365 days), the neural network was able to correctly classify >95% of the 258 chems. in the database.

L8 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 6  
 1994:662443 Document No. 121:262443 French limiting values for occupational exposure to chemicals. Anon. (Fr.). Cahiers de Notes Documentaires, 153, 557-74 (French) 1993. CODEN: CNDIBJ. ISSN: 0007-9952.

AB Limit values (suggested limiting values and max. permissible values) for occupational exposure to chems., including carcinogens, which have been published by the French Labor Ministry are presented in one table. This table is preceded by information on the following points: monitoring of workplace atmospheres (sampling and anal.; aerosols); permitted values (definitions and aims; additivity convention; elements and compds.; limiting occupational exposure values; carcinogens); mandatory values; and values recommended by the French National Health Insurance Fund (CNAM).

L8 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 7  
 1993:65829 Document No. 118:65829 Air contaminants. (Occupational Safety and Health Administration, U. S. Dep. Labor, Washington, DC, 20210, USA).

Federal Register, 57(114, Bk. 2), 26002-601 (English) 12 Jun 1992. CODEN: FEREAC. ISSN: 0097-6326.

AB Proposed amendments of existing air contaminant stds. for the maritime and construction industries and extension of air contaminant stds. to agricultural employees (only employees of farms with >10 nonfamily employees are covered) are given under the Federal Occupational Safety and Health Administration. Tables that indicated transitional limits, based on established threshold limit values, indication of skin protection needs, proposed time-weighted av. exposure (any 8-h work shift for 40-h week), short-term exposure limit (15-min time-weighted av.), ceiling (exposure during any part of the work day, or if instantaneous monitoring is not feasible, the 15-min time-weighted av.), and/or skin protection needs are given for the shipyard, marine terminal and longshoring, construction, and agricultural industries. Extensive data on health effects of the substances to be regulated and preliminary regulatory impact analyses are given for general industry and the specific industrial sectors.

L8 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 8  
1990:83178 Document No. 112:83178 Reportable quantity adjustments; delisting of ammonium thiosulfate. (United States Environmental Protection Agency, Washington, DC, 20460, USA). Federal Register, 54(155), 33426-84 (English) 14 Aug 1989. CODEN: FEREAC. ISSN: 0097-6326.

AB Under the Federal Comprehensive Environmental Response, Compensation, and Liability Act, the EPA is promulgating final reportable quantities (RQ) for 258 hazardous substances and hazardous waste streams. NH<sub>4</sub> thiosulfate is removed from the list of hazardous substances since the median lethal concn. is well above 500 mg/L for aquatic toxicity. Also included in this final rule is replacement of the registered trademark Gelthane with the generic name difocal, as several companies manuf. this substance.

L8 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 9  
1989:218230 Document No. 110:218230 Air contaminants. (United States Occupational Safety and Health Administration, Washington, DC, 20210, USA). Federal Register, 54(12, Bk. 2), 2332-983 (English) 19 Jan 1989. CODEN: FEREAC. ISSN: 0097-6326.

AB Under the Federal Occupational Safety and Health act, OSHA is amending existing air containment stds. and setting new permissible exposure limits for toxic substances commonly used in the workplace.

=> d 12

L2 ANSWER 1 OF 9082 MEDLINE  
AN 2002642415 MEDLINE  
DN 22288963 PubMed ID: 12402082  
TI Physiological and cellular responses of the 2,4-D degrading bacterium, Burkholderia cepacia YK-2, to the phenoxyherbicides 2,4-D and 2,4,5-T.  
AU Cho Yun-Seok; Kahng Hyung-Yeel; Kim Chi-Kyung; Kukor Jerome J; Oh Kye-Heon  
CS Department of Life Science, Soonchunhyang University, P.O. Box 97, Asan, Chung-Nam, 336-600, Korea.  
NC P42-ES-04911 (NIEHS)  
SO CURRENT MICROBIOLOGY, (2002 Dec) 45 (6) 415-22.  
Journal code: 7808448. ISSN: 0343-8651.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
OS GENBANK-AF232906  
EM 200301  
ED Entered STN: 20021029  
Last Updated on STN: 20030125

Entered Medline: 20030124

=> s trichlorophenoxy acetic acid or trichlorophenoxyacetic acid or 2,4,T  
4 FILES SEARCHED...  
L19 5543 TRICHLOROPHENOXY ACETIC ACID OR TRICHLOROPHENOXYACETIC ACID OR  
2,4,T

=> s l19 and extraction  
L10 204 L19 AND EXTRACTION

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L11 9 L10 AND ACETONE

=> dup remove l11  
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L12 4 DUP REMOVE L11 (5 DUPLICATES REMOVED)

=> d l12 1-4 cbib abs

L12 ANSWER 1 OF 4 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.  
97227754 EMBASE Document No.: 1997227754. GC/MS (SIM) determination of 14 pesticides including cyhexatin and 2,4,5-T in nuts. Kawasaki M.; Fukuhara K.; Katsumura R.; Takasaka N.; Uchiyama S.. M. Kawasaki, Hatano Research Institute Food, Drug Safety Center, 729-5, Ochiai, Hadano, Kanagawa 257, Japan. Journal of the Food Hygienic Society of Japan 38/3 (161-169) 1997.  
Refs: 12.  
ISSN: 0015-6426. CODEN: SKEZAP. Pub. Country: Japan. Language: Japanese. Summary Language: English; Japanese.  
AB GC/MS with selected ion monitoring ((GC/MS (SIM)) has been developed as a screening method for the determination of 14 pesticides residues including cyhexatin and 2,4,5-T in nuts. The pesticides were extracted with **acetone** from nuts, and then partitioned between n-hexane and acetonitrile. Clean-up was conducted by solid-phase **extraction** (SPE) with a Bond Elut Florisil column. Most of the pesticides were eluted in a mixture of n-hexane and **acetone** (17: 3) from the column, and the eluate was examined by GC/MS (SIM). Cyhexatin and 2,4,5-T were analyzed after derivatization and SPE clean-up. Recoveries of 14 pesticides from 6 kinds of nuts were mostly over 80%. This method is effective for multi-residue analysis of pesticides in nuts.

L12 ANSWER 2 OF 4 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.DUPLICATE 1  
97170517 EMBASE Document No.: 1997170517. Comparison between methyl and pentafluorobenzyl esterification for analysis of 9 phenoxy acid herbicides in agricultural products. Hirahara Y.; Miyata M.; Kamakura K.; Watanabe Y.; Takeda H.; Maeda K.; Tonogai Y.. Y. Tonogai, Osaka Branch, National Inst. of Health Sciences, 1-1-43 Hoenzaka, Chuo-ku, Osaka 540, Japan. Japanese Journal of Toxicology and Environmental Health 43/2 (129-139) 1997.  
Refs: 22.  
ISSN: 0013-273X. CODEN: JJTHEC. Pub. Country: Japan. Language: Japanese. Summary Language: English; Japanese.  
AB Ester types (2,4-dichlorophenoxyacetic acid (2,4-D) ethyl, 2,4-D butyl and MCPA-thioethyl) and free acid types (2,4-D, 2,4,5,- **trichlorophenoxyacetic acid** (2,4,5,-T) 2-methyl-4-chlorophenoxyacetic acid (MCPA), m- chloroperbenzoic acid (MCPB), mecoprop and dichlorprop) of phenoxy acid herbicides in agricultural products were simultaneously extracted from samples with **acetone** for vegetables/fruits, and with acetonitrile for cereals/beans, and then re-extracted with ethyl acetate. Three ester types of herbicides extracted from the samples were cleaned up by Sep-Pak.RTM.

Florisil, and then determined by ECD-GC and GC-MS (SIM). Recoveries of the ester types of herbicides determined by GC and GC-MS spiked at 1.25 ppm to asparagus, taro, brown rice and corn were 61.4 76.9% and 50.8%-63.9%, respectively. Six free acid types of herbicides were esterified by pentafluorobenzyl bromide or diazomethane and determined by GC-MS (SIM) without cleaning up by solid phase **extraction**. Recoveries of the free acid types of herbicides esterified by pentafluorobenzylation and methylation spiked at 1.25 ppm to the samples were 68.5 98.5% and 53.7-88.1%, respectively. It was clarified that the concentration of pentafluorobenzyl bromide in **acetone** should be 5-10% to have sufficient recoveries for the esterification. Methylation was superior to pentafluorobenzylation for the simplicity of manipulation, but was inferior for the sensitivity of GC and GC-MS.

- L12 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 2  
 1993:253530 Document No. 118:253530 Analysis of chlorophenoxy acids and other acidic contaminants in food crops. Hajslova, J.; Tahtah, W. H.; Jehlickova, Z.; Kocourek, V.; Cuhra, P. (Dep. Food Chem. Anal., Prague Inst. Chem. Technol., Prague, 166 28, Czech.). Science of the Total Environment, 132(2-3), 259-74 (English) 1993. CODEN: STENDL. ISSN: 0048-9697.
- AB Several chlorophenoxy acids and chlorinated phenols were detd. by means of gas chromatog. in contaminated samples of cereals. **Extn.** of the plant matrix with an **acetone**/water mixt. followed by alk. hydrolysis was suitable for isolation of both free and conjugated residues. The use of pentafluorobenzyl bromide for volatilization of analytes, despite an enhanced ECD response, cannot be recommended for routine anal. Methylation with either methanol/sulfuric acid or methanol/BF3 reagent can substitute for diazomethane-based esterification procedure. Mass fragmentog. provided the highest selectivity of detection, and good sensitivity, 5 ppb. Even Me derivs. of monochlorinated analytes, which could not be measured by GC/ECD, could be quantitated at this level.
- L12 ANSWER 4 OF 4 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.  
 79015504 EMBASE Document No.: 1979015504. Evaluation of silica gel and XAD-4 as adsorbents for herbicides in air. Grover R.; Kerr L.A.. Herbicide Behav. Environm. Sect., Res. Stat., Agric. Canada Regina, Saskatchewan S4P 3A2, Canada. Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes 13/3 (311-321) 1978.  
 CODEN: JPFCD2. Pub. Country: United States. Language: English.
- AB Silica gel and XAD-4 resin were shown to be efficient solid adsorbents for sampling vapors of n-butyl and iso-octyl esters of (2,4-dichlorophenoxy)acetic acid (2,4-D), n-butyl ester of (2,4,5-trichlorophenoxy)**acetic acid** (2,4,5-T), octanoate ester of 3,5-dibromo-4-hydroxybenzonitrile (bromoxynil), S-(2,3,3-trichloroallyl)diisopropylthiocarbamate (triallate), and .alpha.,.alpha.,.alpha.-trifluoro-2, 6-dinitro-N,N-dipropyl-p-toluidine (trifluralin) herbicides in ambient air. The absorbed herbicides were readily extracted by shaking the adsorbent with methanol or by Soxhlet **extraction** with a 1:1 mixture of **acetone** and n-hexane and subsequently analyzed with electron-capture GLC. The overall efficiencies of the two adsorbents, for both trapping and ease of **extraction**, were in the 85 to 100% range.